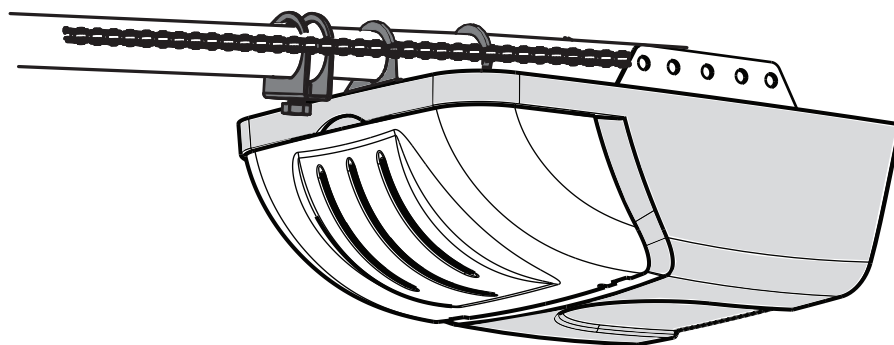


merlin[®]

more than magic

www.merlingo.com



MT60P

Sectional and Tilt Garage Door Opener

Installation and Operating Instructions

Owners Copy: Please keep these instructions for future reference



This manual contains **IMPORTANT SAFETY** information.
DO NOT PROCEED WITH THE INSTALLATION BEFORE READING THOROUGHLY.



START BY READING THESE IMPORTANT SAFETY INSTRUCTIONS



WARNING

- Failure to comply with the following instructions may result in serious personal injury or property damage.
- Read and follow all instructions carefully.
- The garage door opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the instructions in this manual.



These safety alert symbols mean **WARNING** : A possible risk to personal safety or property damage exists.



Keep garage door balanced. Do not let the garage door opener compensate for a binding or sticking garage door. Sticking, binding or unbalanced doors must be repaired before installing this opener.



Do not wear rings, watches or loose clothing while installing or servicing a garage door opener.



Frequently examine the door installation, in particular cable, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since springs and hardware are under extreme tension and a fault can cause serious personal injury.



To avoid serious personal injury from entanglement, **remove all ropes, chains and locks connected to the garage door** before installing the door opener.



Installation and wiring must be in compliance with your local building and electrical codes.



The safety reverse system test is very important. Your garage door **MUST** reverse on contact with a 40mm obstacle placed on the floor. Failure to properly adjust the opener may result in serious personal injury from a closing garage door. **Repeat the test once a month and make any necessary adjustments.**



This opener should not be installed in a damp or wet space exposed to weather.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



The Protector System™ must be used for all installations where the closing force as measured on the bottom of the door is over 400N (40kgf). Excessive force will interfere with the proper operation of the Safety Reverse System or damage the garage door.



After installation, ensure that the parts of the door do not extend over public footpaths or roads.



Install the wireless wall control (or any additional wall control) **in a location where the garage door is visible, at a height of at least 1.5m and out of the reach of children to operate push button(s) or transmitter(s).** Serious personal injury from a closing garage door may result from misuse of the opener.



Permanently fasten the Warning Labels in Prominent Places, adjacent to Wall Controls and manual release mechanisms as a reminder of safe operating procedures.



Activate opener only when the door is in full view, free of obstructions and the opener is properly adjusted. No one should enter or leave the garage while the door is in motion.



Do not allow children to play near the door, or door controls.



Disconnect electric power to the garage door opener before making repairs or removing covers.

KEEP THESE INSTRUCTIONS

Warning: If your garage has no service entrance door, a CM1702 outside quick release must be installed. This accessory allows manual operation of the garage door from outside in case of power failure.

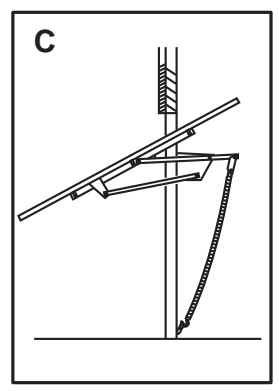
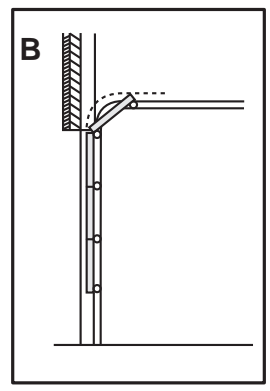
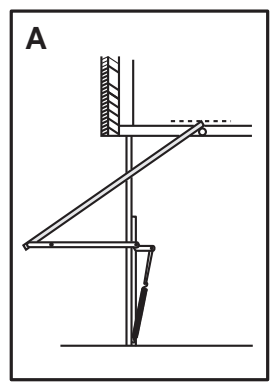
CONTENTS	PAGE
SAFETY INSTRUCTIONS	1
DOOR TYPES	2
TOOLS REQUIRED	2
HARDWARE PROVIDED	2-3
BEFORE YOU BEGIN	4
COMPLETED INSTALLATION	4
ASSEMBLY	4-6
INSTALLATION	7-11
ADJUSTMENT	12-13
WIRELESS PROGRAMMING	14-15

INSTALL THE PROTECTOR SYSTEM (OPTIONAL)	13
SPECIAL FEATURES	17
ACCESSORIES	18
REPLACEMENT PARTS	19-20
CARE OF YOUR OPENER	20
MAINTAINING YOUR OPENER	20
TROUBLESHOOTING	21
OPERATION OF YOUR OPENER	22
SPECIFICATIONS	22
WARRANTY	23

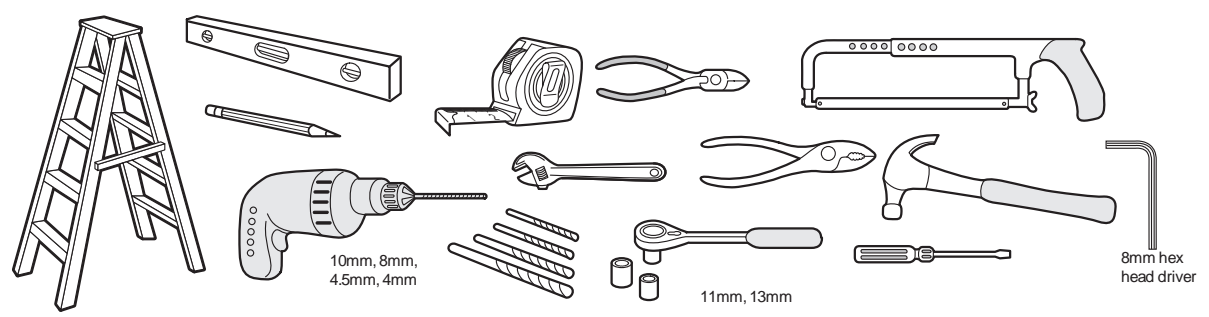
1 DOOR TYPES

- A. One-Piece Door with Horizontal Track Only
- B. Sectional Door with curved track
- C. One-Piece Door without track

To suit spring balanced sectional doors up to 13.5m² or spring balanced Tilt doors up to 8.5m².



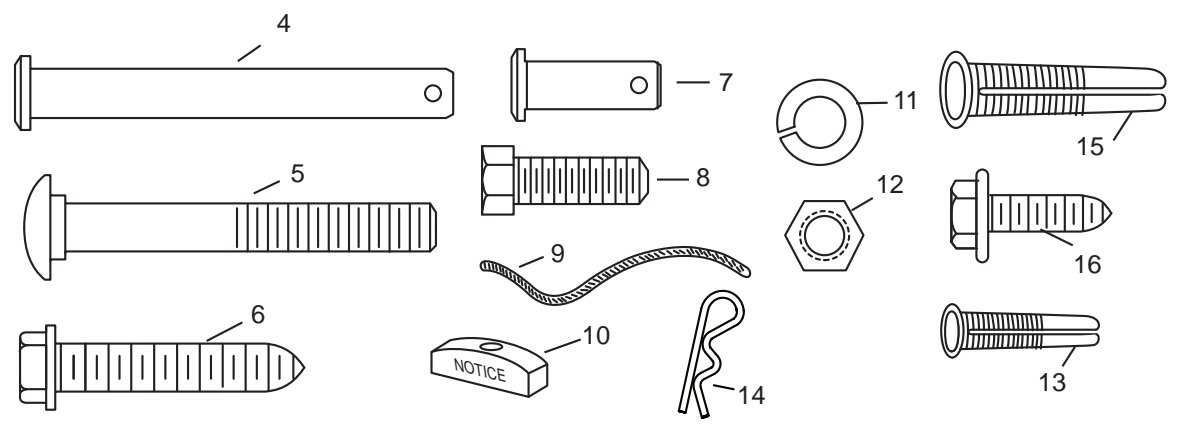
2 TOOLS REQUIRED



3 HARDWARE PROVIDED

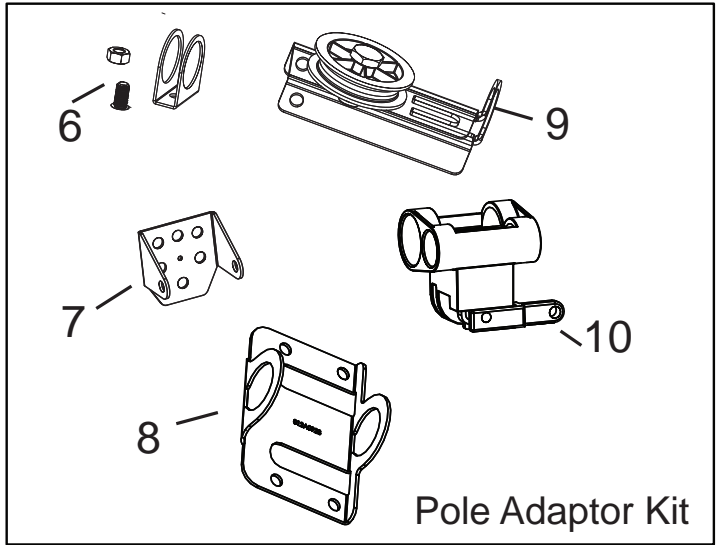
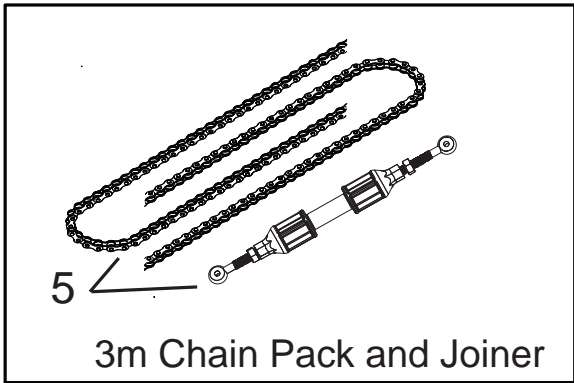
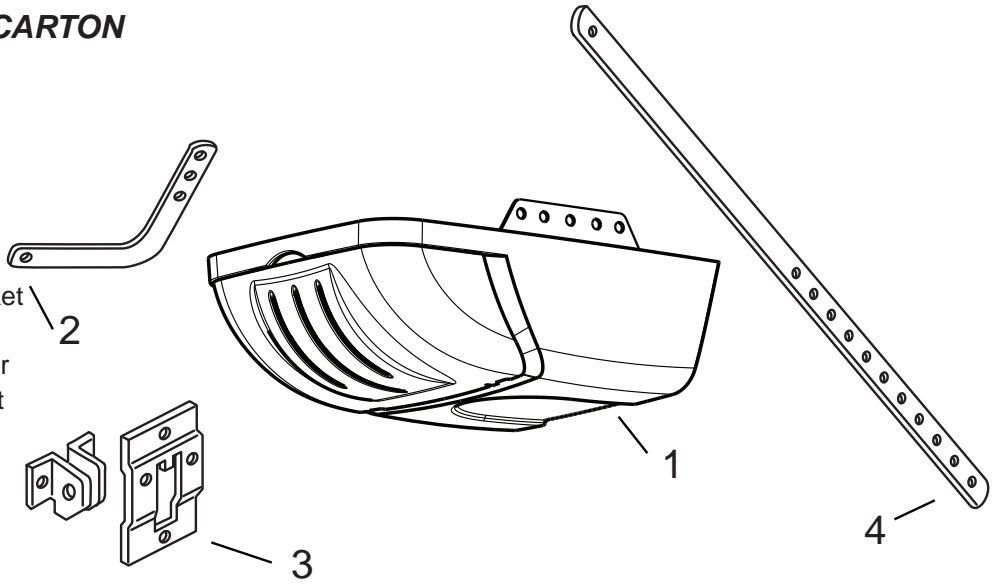
Installation Hardware:

- (4) Large Clevis Pin (1)
- (5) Carriage Bolts (2)
- (6) Wood Screws (4)
- (7) Clevis Pins (medium) (2)
- (8) Hex Screws (4)
- (9) Rope
- (10) Handle
- (11) Lock Washers (6)
- (12) Nuts (6)
- (13) 4mm Anchors (2)
- (14) R-Clip (4)
- (15) 8mm Anchors (4)
- (16) Sheet Metal Screw (4)



4 MT60P OPENER CARTON

- (1) MT60P Opener
- (2) Angled door arm
- (3) Door mounting Bracket
- (4) Straight door arm
- (5) Chain pack and joiner
- (6) Stop collar, nut & bolt
- (7) Header bracket
- (8) Pole kit adaptor
- (9) Idler pulley assembly
- (10) Trolley assembly

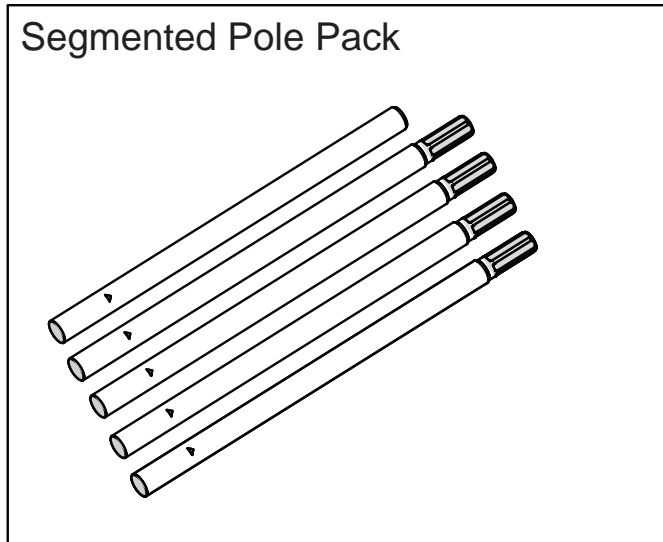


POLE OPTIONS

2.75m Segmented pole kit

NOT PICTURED

2.75m or 3m one piece pole

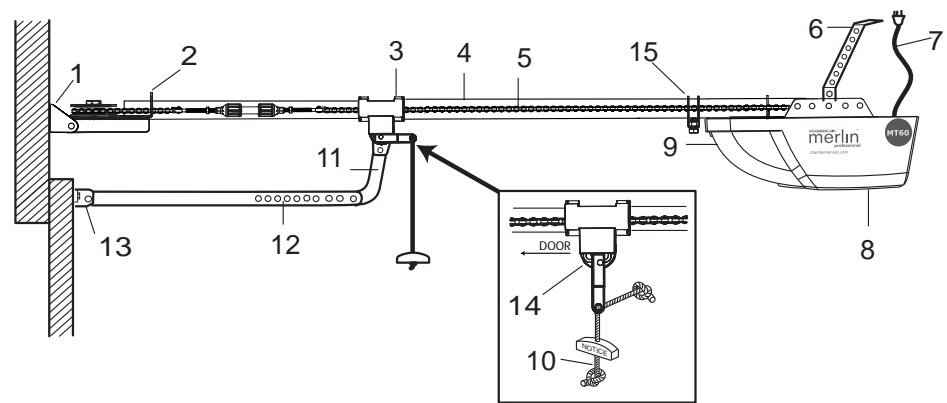


5 BEFORE YOU BEGIN:

1. Look at the wall or ceiling above the garage door. The header bracket **must** be securely fastened to structural supports.
2. Do you have a finished ceiling in your garage? If so, a support bracket and additional fastening hardware (not supplied) may be required.
3. Do you have an access door in addition to the garage door? If not, model CM1702 Outside Quick Release Accessory is required. This accessory allows manual operation of the garage door from outside in case of power failure.
4. Complete the following test to make sure your garage door is balanced and is not sticking or binding:
 - Lift the door about halfway. Release the door. If balanced, it should stay in place, supported entirely by its springs.
 - Raise and lower the door to see if there is any binding or sticking. If your door binds, sticks, or is out of balance, call a trained door technician.

6 COMPLETED INSTALLATION (TILT DOOR EXAMPLE SHOWN)

As you proceed with the assembly, installation and adjustment procedures in this manual, you may find it helpful to refer back to this illustration of a completed installation for tilt doors (for sectional doors refer section 21).



- | | | |
|---------------------------|-----------------------------------|-----------------------------|
| (1) Header Bracket | (7) Power Cord | (12) Straight Door Arm |
| (2) Idler Pulley Assembly | (8) Opener | (13) Door Bracket and Plate |
| (3) Trolley | (9) Light Lens | (14) Trolley Release Arm |
| (4) Pole | (10) Manual Release Rope & Handle | (15) Stop Collar |
| (5) Chain | | |
| (6) Hanging Bracket | (11) Curved Door Arm | |

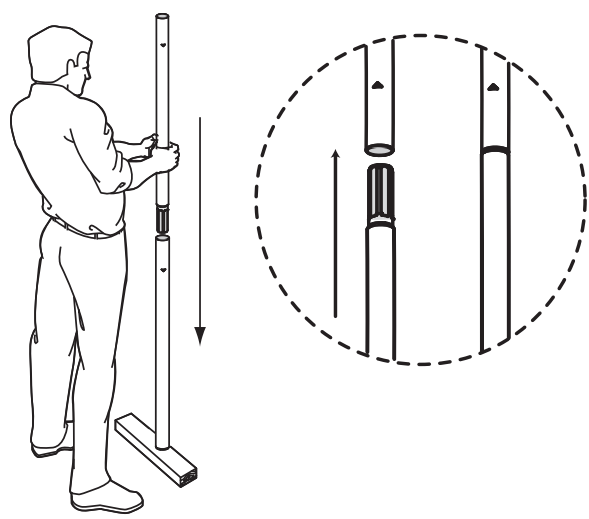
ASSEMBLY SECTION

7 ASSEMBLE POLE PACK

Remove the 5 sectional poles from the carton and lay them out on the floor. The end pole (i.e the pole without a tapered edge) should be placed at the header end.

Assemble the poles by inserting the tapered end into the non-Tapered end of the next pole as illustrated. Ensure that each pole is pushed firmly into the next.

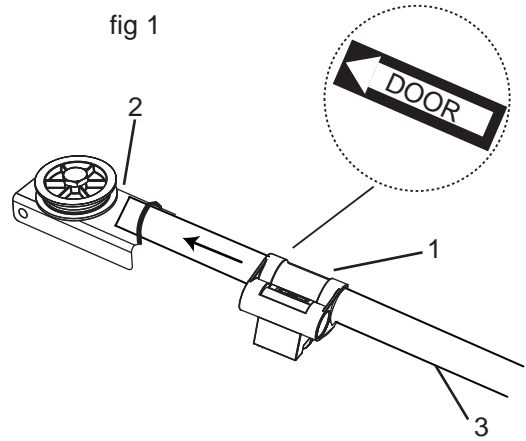
NOTE: If using a mallet to drive the joins home, use a piece of timber at each end to minimise burring.



8 INSTALL THE TROLLEY AND IDLER PULLEY

Slide the trolley assembly (1) onto the pole (3) taking note of the door direction arrow (fig 1). The trolley should be located midway along the pole.

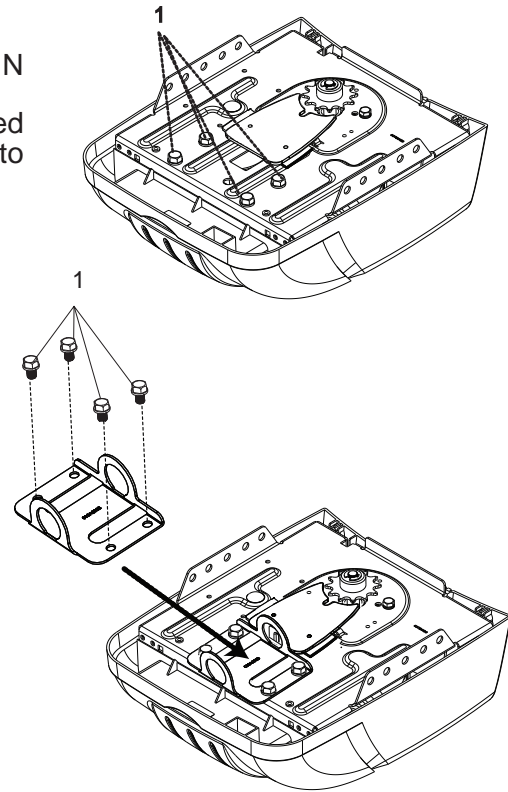
Insert the pole (3) into the idler pulley assembly (2) as illustrated.



9 INSTALL THE POLE ADAPTOR

Remove the four (factory fitted) washered screws (1). THESE WASHERED SCREWS MUST BE USED TO FASTEN THE POLE KIT ADAPTOR.

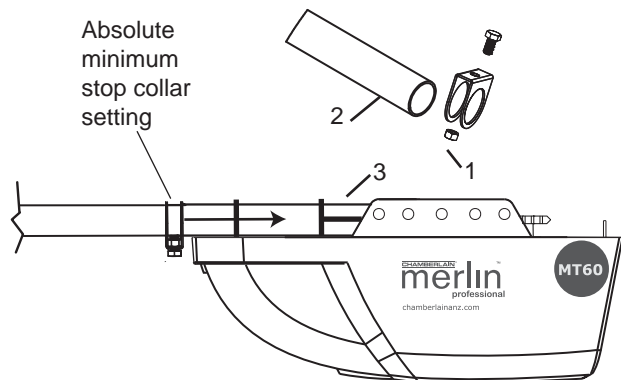
Place the pole adaptor bracket on the opener as illustrated using the 4 washered screws (1) to fasten in place (tighten to between 20-22Nm).



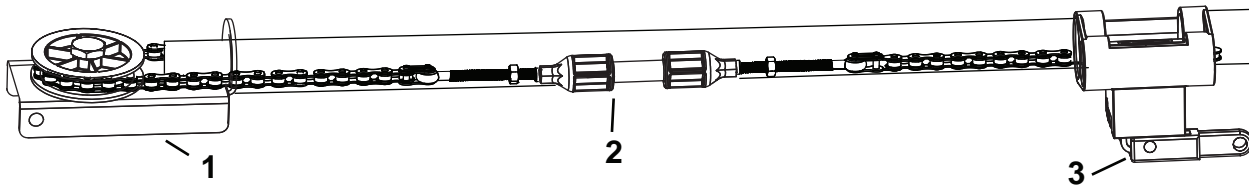
10 INSTALL THE STOP COLLAR AND POLE

Slide the stop collar (1) onto the pole (2) (opener end). Fit the pole through the adaptor bracket (3) to the opener, then fasten the stop collar above the edge of the lens cover as illustrated.

Move the stop collar to the open limit on the pole, set the stop collar back 25mm toward the opener and fasten in place. Observe the absolute stop position.



11 INSTALL THE CHAIN



Fitting the Chain:

Wrap the chain around the idler pulley (1) and drive sprocket (as illustrated in fig 1), ensuring the chain passes through the trolley assembly (3).

NOTE: Locate the chain connector as illustrated above approximately 300mm from the Idler pulley.

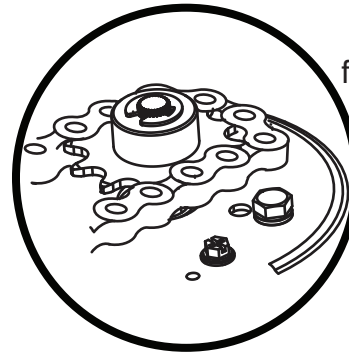
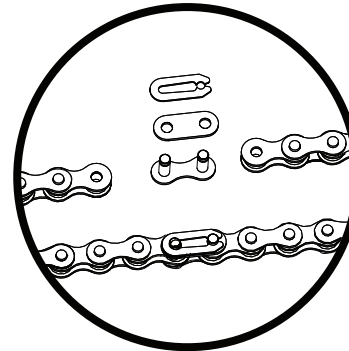


fig. 1

Additional Step for 2750mm Pole

All Chain kits supplied are for 3000mm poles. You will need to remove the pre-measured section of chain for use with the 2750mm pole option.

Locate the two removable links and remove the section of chain between them. Once the section of chain has been removed use one of the joiners to re-join the shortened chain assembly.

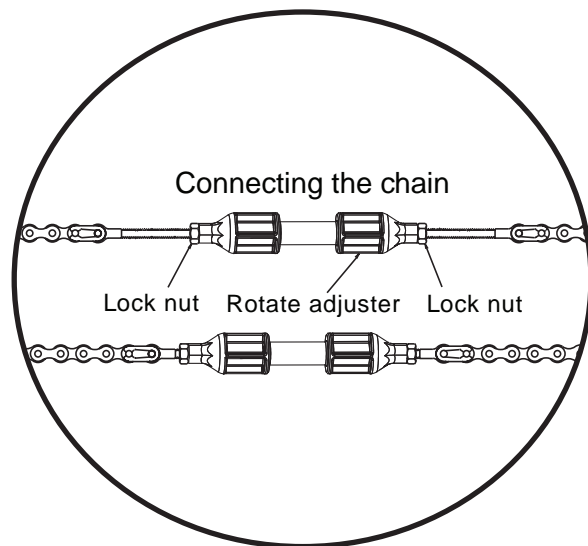


Tighten the Chain

Once the chain has been installed, join the two ends together using the connector. Tighten the connector until the chain has no slack. **DO NOT OVER TIGHTEN!**

Once the chain has been tensioned, tighten the lock nuts.

NOTE: Use the tube of grease provided to lubricate the chain and sprocket.





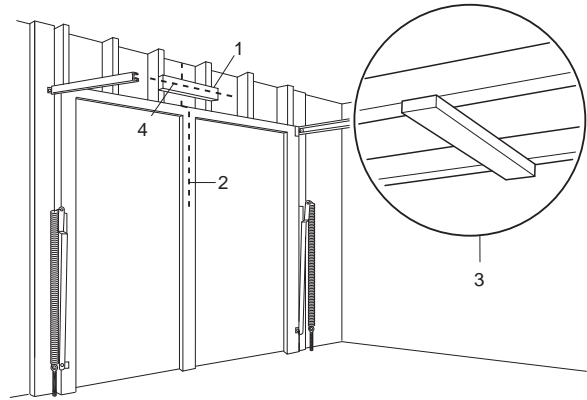
Wear protective goggles when working overhead to protect your eyes from injury. Disengage all existing garage door locks to avoid damage to the garage door. To avoid serious personal injury from entanglement, remove all ropes connected to the garage door before installing the opener.

It is recommended that the opener be installed 2.1m (7 feet) or more above the floor where space permits.

12 POSITION THE HEADER BRACKET

The header bracket must be rigidly fastened to a structural support of the garage. Reinforce the wall or ceiling with a 40mm (1-1/2") board if necessary. Failure to comply may result in improper operation of safety reverse system.

You can attach the header bracket either to the header wall (1) or to the ceiling (3). Follow the instructions which will work best for your particular requirements. With the door closed, mark the vertical centerline (2) of the garage door. Extend line onto header wall above the door. Open door to highest point of travel. Draw an intersecting horizontal line (4) on header wall 5 cm (2") above high point to provide travel clearance for top edge of door. Height depends on door type refer section 15.



13 INSTALL THE HEADER BRACKET

NOTE: Refer to vertical centre and horizontal lines created in section 12 for proper placement of header bracket.

A. Wall mount: centre the header bracket (1) on the vertical centre line (2) with the bottom edge of the header bracket on the horizontal line (the horizontal line should be 50 mm for Sectional Doors & Tracked Tilt Doors and 200mm for One Piece Tilt doors, above the spring (4) (with the arrow pointing toward the ceiling). Mark all of the header bracket holes (5). Drill 4.5mm (3/16") pilot holes and fasten the header bracket with wood screws (3).

B. Ceiling mount: extend vertical centre line (2) onto the ceiling. Centre the header bracket (1) on the vertical mark no more than 150mm (6") from the wall. Mark all of the header bracket holes (5). Drill 4.5mm (3/16") pilot holes and fasten the header bracket with wood screws (3). For concrete ceiling mount, use concrete anchors provided.

The Idler Pulley Bracket will also need to be turned upside down (fig 1). To do this remove the chain from the pulley, twist the Idler bracket 180° in to the upside down position & reassemble the chain around the pulley.

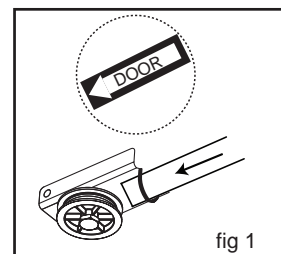
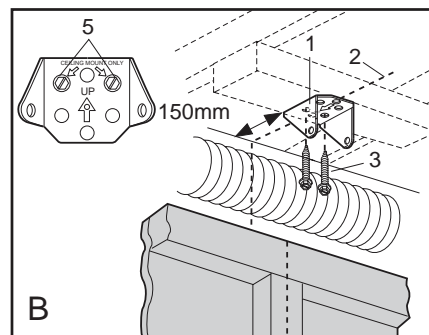
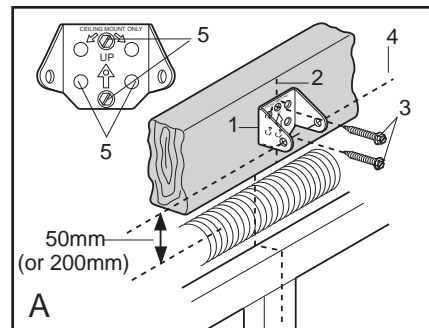
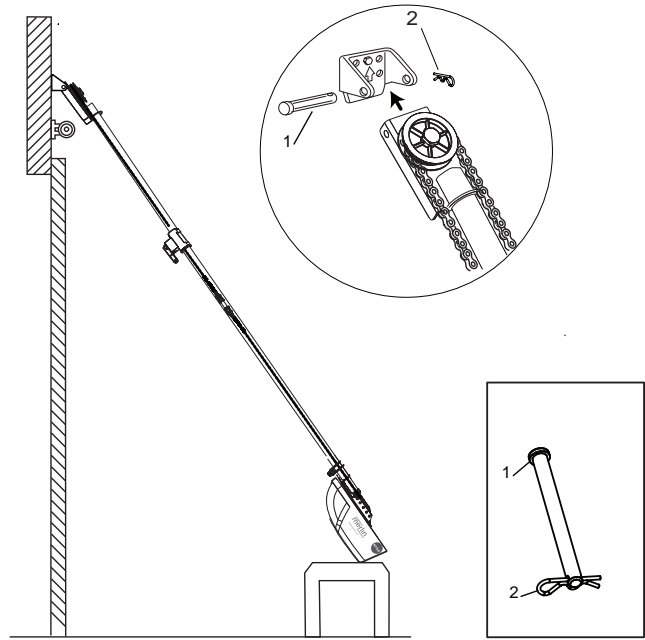


fig 1

14 ATTACH POLE ASSEMBLY TO HEADER BRACKET

Position opener on garage floor below the header bracket. Use packing material to protect the cover.

NOTE: To enable the pole to clear sectional door springs, it may be necessary to lift opener onto a temporary support. The opener must either be secured to a support or held firmly in place by another person. Raise Pole assembly until chain pulley and header brackets come together. Join with clevis pin (1). Insert R-clip (2) to secure.

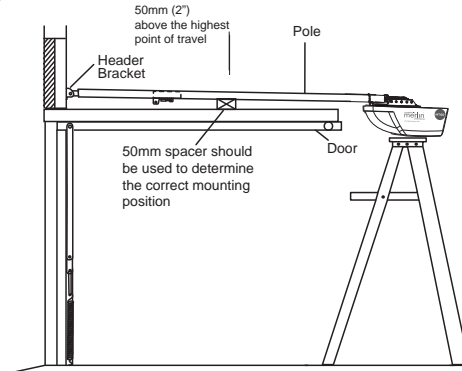
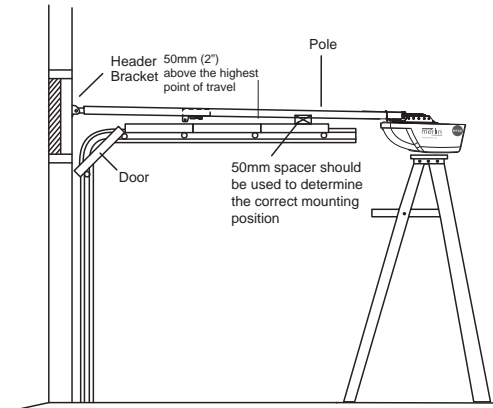


15 POSITION THE OPENER

SECTIONAL DOOR OR TRACKED TILT DOOR

You will need a 50mm piece of timber or similar spacer to gauge the distance between door and pole.

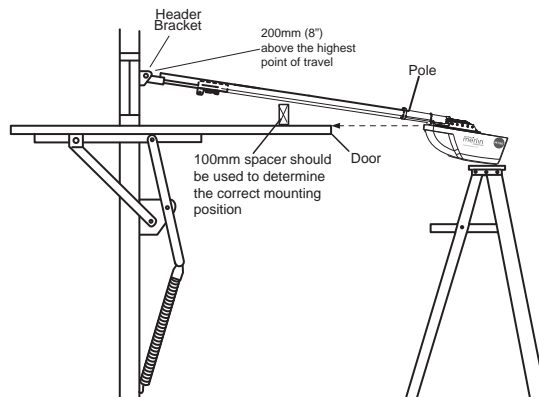
1. Raise the opener onto support.
2. Open the door completely, place a 50mm spacer between the door and the pole (as shown).
3. If the top section or panel hits the trolley when you raise the door, pull down on the trolley arm to disengage the opener. Leave the trolley in this position until opener is fastened in place.



ONE PIECE TILT DOOR

You will need a 100mm (4") piece of timber or similar spacer to gauge the distance between door and pole.

1. Raise the opener onto support.
2. Open the door completely, place a 100mm spacer between the door and the pole (as shown).
3. The top of the door should be level with the top of the opener. Do not position the opener more than 50mm (2") above this point.



16 HANG THE OPENER

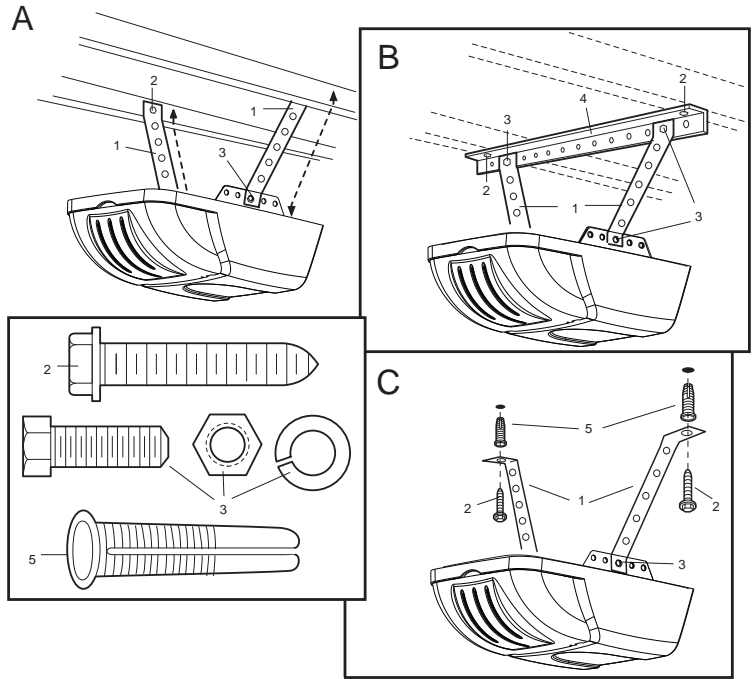
The opener must be securely fastened to a structural support of the garage.

Three representative installations are shown. Yours may be different. Hanging brackets (1) should be angled (Figure A) to provide rigid support. On finished ceilings, (Figure B) attach a sturdy metal bracket (not supplied) (4) to a structural support before installing the opener. For concrete ceiling mount, (Figure C), use concrete anchors provided.

On **each** side of opener measure the distance from the opener to the structural support (or ceiling).

Cut both pieces of the hanging bracket to required lengths. Flatten one end of each bracket and bend or twist to fit the fastening angles. **Do not bend at the bracket holes.** Drill 4.5mm (3/16") pilot holes in the structural supports (or ceiling). Attach brackets to supports with wood screws (2).

Lift opener and fasten to hanging brackets with screw, lock washer and nut (3). Check to make sure pole is centered over the door. REMOVE 50mm or 100mm board. Operate door manually. If door hits the pole, raise header bracket.

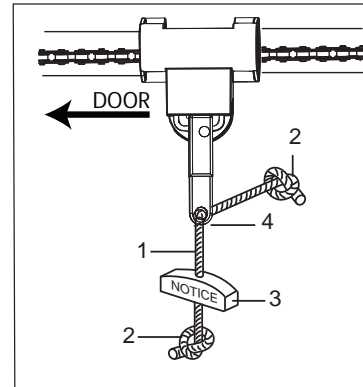


17 ATTACH EMERGENCY RELEASE ROPE & HANDLE

Thread one end of rope (1) through hole in top of red handle so "NOTICE" reads right side up as shown (3). Secure with an overhand knot (2). Knot should be at least 25mm (1") from end of the rope to prevent slipping.

Thread other end of rope through hole in release arm of the outer trolley (4). Adjust rope length so that handle is less than 1.8m (6 feet) above the floor. Secure with an overhand knot.

NOTE: If it is necessary to cut rope, heat seal cut end to prevent fraying.



DO NOT DISENGAGE THE OPENER TO MANUAL OPERATION WITH CHILDREN, PERSONS OR OTHER OBJECTS INCLUDING MOTOR VEHICLES WITHIN THE DOORWAY: (The door is under significant tension and if the door has developed a fault or incorrect tension, it may be unsafe and may fall rapidly.)

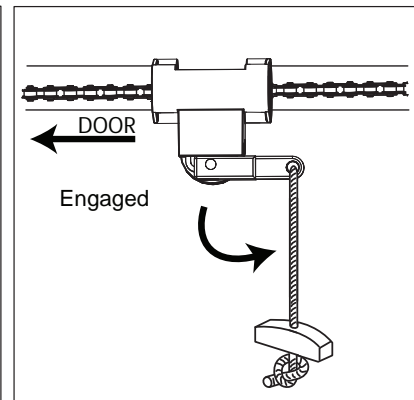
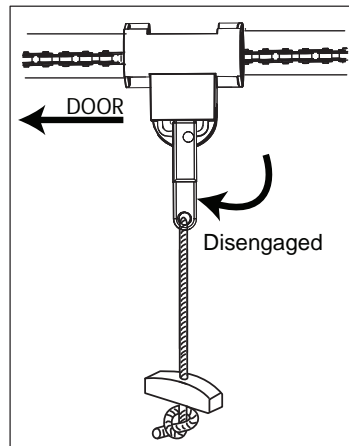
Door should be released in the closed position if possible.

To Disengage:

Pull down on the red handle.
DO NOT USE THE HANDLE TO OPEN OR CLOSE THE DOOR.

To Engage:

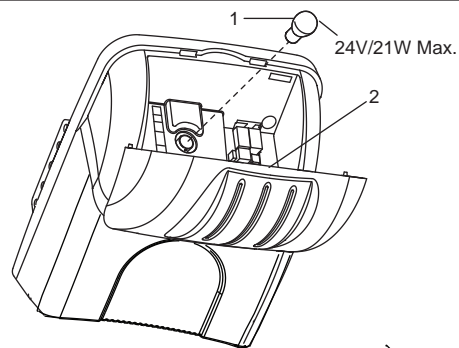
Pull the red handle up and back towards the opener. The chain will engage when opener is activated.



18 INSTALL LIGHT

Gently pull lens (2) downward until the lens hinge is in the fully open position. Do not remove the lens. Install a 24V/21W maximum light bulb (1) in the socket as shown. The light will turn on and remain lit for 2-1/2 minutes when power is connected. After 2-1/2 minutes it will turn off. To close, gently push diffuser up until engaged.

Replace burnt out bulbs with Chamberlain 041A0079 or reputable light bulbs.



19 FASTEN DOOR BRACKET

Sectional and One-Piece Door Installation Procedure:

Door bracket (1) has left and right side fastening holes. If your installation requires top and bottom fastening holes use both the door bracket and door bracket plate (2) as shown.

1. Center door bracket (with or without door bracket plate, as required) at the top inside face of door as shown. Mark holes.

A. One-piece doors: locate bracket at inside face of the door 0-100mm down.

B. Sectional door: 150 - 250mm below the top of the door.

2. **A. Wooden doors**

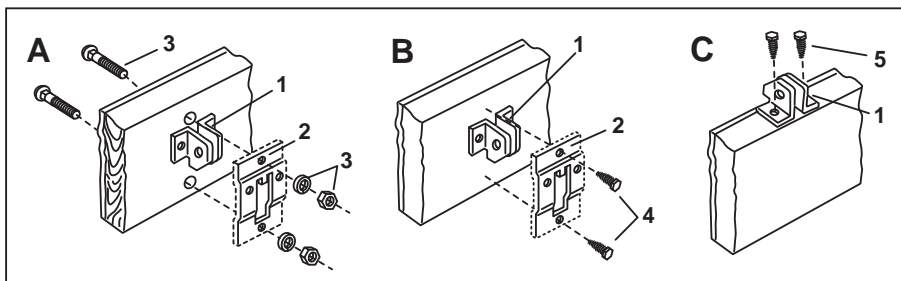
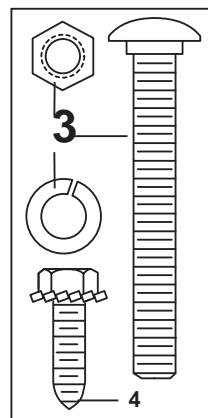
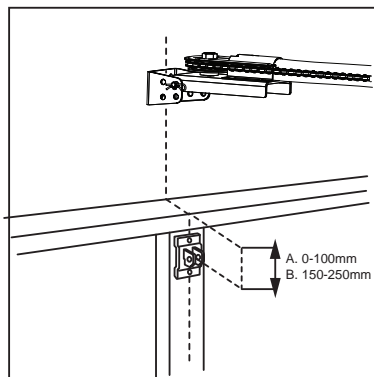
Drill 8mm holes (5/16") and fasten the door bracket with nut, lock washer, and carriage bolt (3).

B. Sheet metal doors

Fasten with sheet metal screws (4).

C. One-piece door optional

Fasten with wood screws (5).



20 CONNECTING DOOR ARM ONE PIECE DOORS

Assemble the Door Arm:

- Fasten the straight and curved door arm sections together to the longest possible length (with a 2 or 3 hole overlap) (Figure 4).
- Make sure the garage door is fully closed. Connect the straight door arm section to the door bracket with the clevis pin.
- Secure with a ring fastener.
- Pull the emergency release handle disengage the trolley by pulling straight down on the emergency release cord. Slide the trolley toward opener.
- Connect the curved arm section to the trolley using the clevis pin and ring provided.

Figure 4

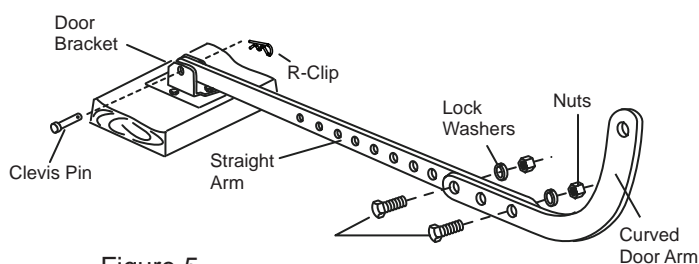
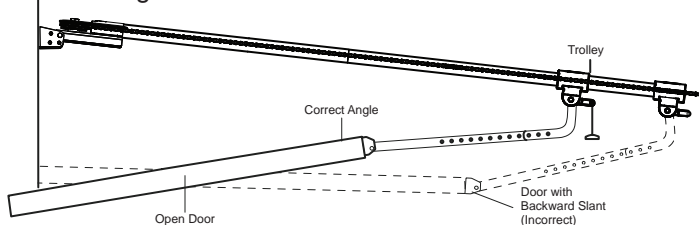


Figure 5



NOTE: When setting the up limits, the door should NOT have a backward slant when fully open (as illustrated Figure 5). A slight backward slant will cause unnecessary buckling and/or jerking operation as the door is being opened or closed from the fully open position (figure 5).

21 CONNECT DOOR ARM SECTIONAL DOORS

Make sure garage door is fully closed. Pull the emergency release handle to disengage the trolley. Slide the trolley assembly back 200mm from the idler pulley.

Figure 1.

- Fasten straight door arm section to trolley assembly using the hardware provided with your opener.

Figure 2.

- Bring arm section together. Find two pairs of holes that line up and join sections. Select holes as far apart as possible to increase door arm rigidity.

Figure 3.

- If holes in curved arm are above holes in the straight arm, disconnect straight arm and cut approximately 150mm from the solid end. Re-connect to trolley with end cut down as illustrated.
- Bring arm sections together.
- Find two pairs of holes that line up and join with bolts, washers and nuts.

Figure 1

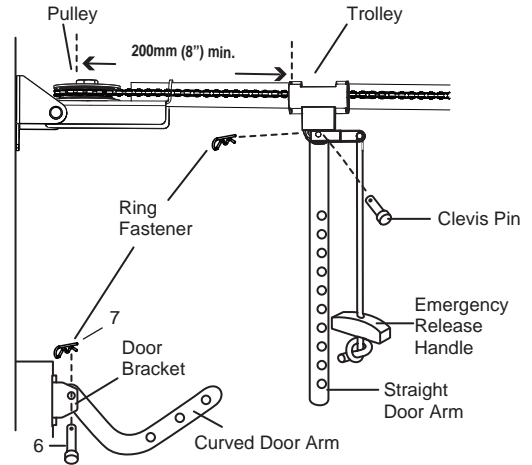


Figure 2

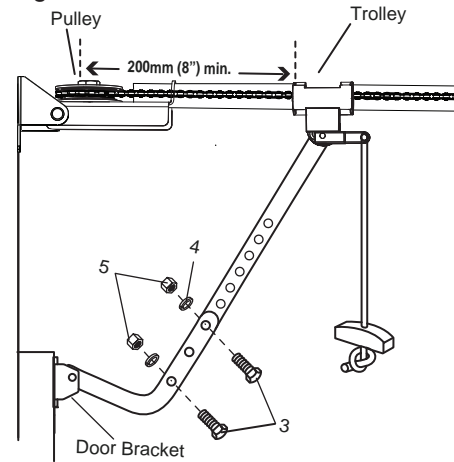
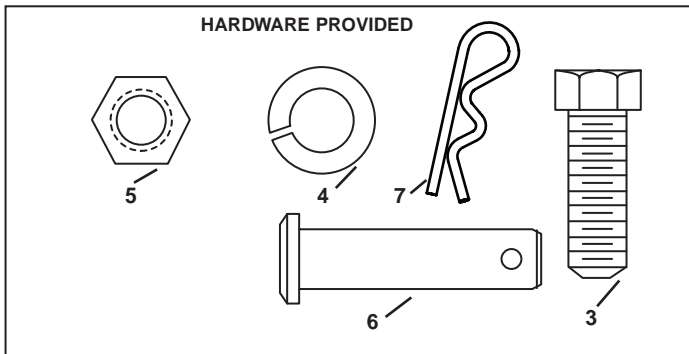
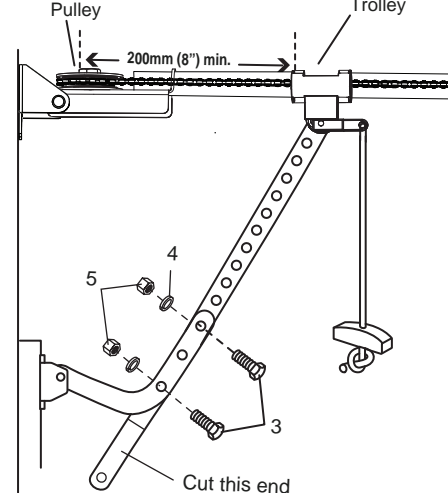


Figure 3



Connect Electric Power
TO AVOID INSTALLATION DIFFICULTIES, DO NOT RUN THE GARAGE DOOR OPENER UNTIL INSTRUCTED TO DO SO. Connect to properly fused and earth power outlet.

22 SETTING THE LIMITS

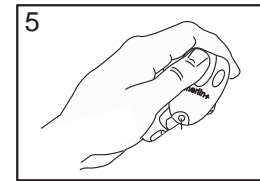
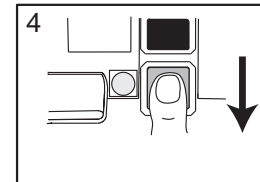
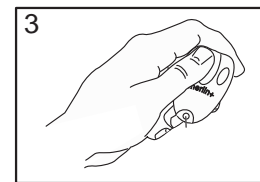
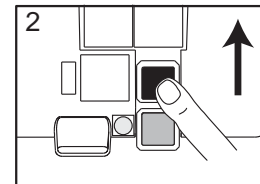
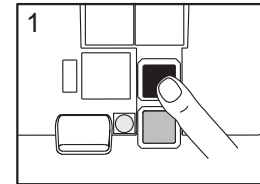
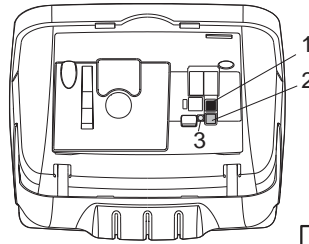
Travel limits regulate the points at which the door will stop when moving up or down. Follow the steps below to set the limits.

NOTE: The door must be in the mid or closed position to begin setting the limits.

Setting the limits:

1. Press and hold the black button (1) until the yellow indicator (3) light starts flashing slowly then release.
2. Adjust the position of the door to the desired UP position by using the black button. Black (1) moves the door UP (open) and orange (2) moves the door DOWN (close). Check to be sure the door opens high enough for your vehicle to pass under.
3. Push the transmitter or door control. This sets the UP (open) limit and begins closing the door.
Immediately press either the orange or the black button. The door will stop.
4. Adjust the desired DOWN (close) limit position using the black and orange buttons. Check to be sure the door is fully closed without applying excessive pressure on the rail (rail should not bow upwards and the chain should not sag or droop below the rail). Push the transmitter or door control. This sets the DOWN (close) limit and begins opening the door.
5. Open and close the door with the transmitter or door control 2 or 3 times (leave door in open position ready for force setting).

NOTE: The force must now be set in order to complete your installation (refer section 22).



23 SETTING THE FORCE

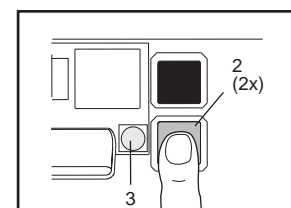
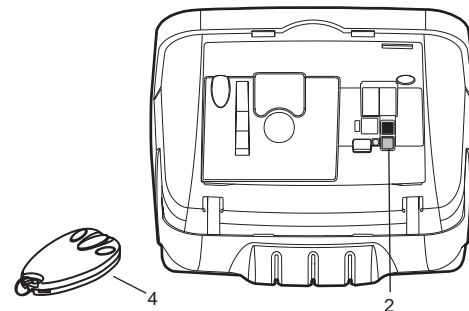
The force setting button is located behind the light lens of the opener. The force setting regulates the amount of power required to open and close the door.

1. Open the light lens. Locate the orange button (2).
2. Push the orange button (2) twice to enter unit into Force Adjustment Mode. The LED (3) (indicator light) will flash quickly.
3. Push the programmed transmitter (4) or push bar on the door control (if installed). The door will travel to the DOWN (close) position. Push the transmitter (4) again, the door will travel to the UP (open) position.

The LED (3) (indicator light) will stop flashing when the force has been learned.

The door must travel through a complete cycle, UP and DOWN, in order for the force to be set properly. If the unit cannot open and close your door fully, inspect your door to ensure that it is balanced properly and is not sticking or binding.

The force MUST be learned in order to properly complete the setting of the limits.



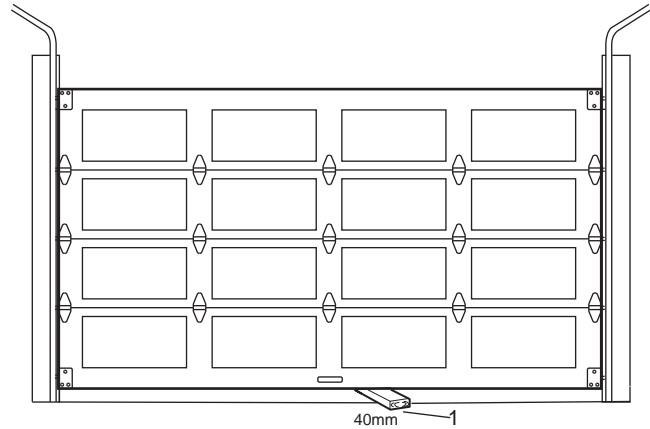
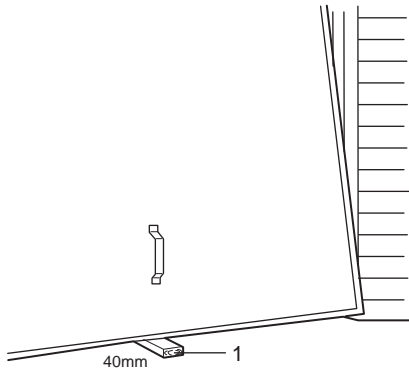
24 TEST THE SAFETY REVERSE SYSTEM



The safety reverse system test is important. Garage door must reverse on contact with a 40mm obstacle laid flat on the floor. Failure to properly adjust opener may result in serious personal injury from a closing garage door. Repeat test once a month and adjust as needed.

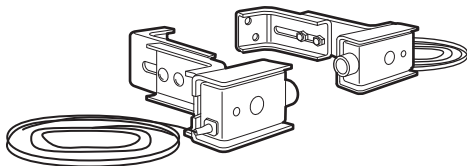
Procedure: Place a 40mm obstacle (1) laid flat on the floor under the garage door. Operate the door in the down direction. The door must reverse on the obstacle. If the door stops on the obstacle, remove obstacle and repeat Setting the Limits and Force Steps, then repeat safety reverse test.

When the door reverses on the 40mm obstacle, remove the obstacle and run the opener through a complete travel cycle. Door must not reverse in closed position. If it does, repeat Setting the Limits and Force then repeat safety reverse test.



STANDARD INSTALLATION COMPLETE

25 INSTALL THE PROTECTOR SYSTEM™ (See accessories)



SAFETY FIRST!

Whilst Chamberlain have engineered safety features into your garage door opener, we urge you to consider fitting IR Beams to your new garage door opener. In many countries these devices are compulsory to prevent serious injury or property damage. For your own peace of mind and the safety of others please install this inexpensive safety device.

Install this accessory for all installations on tilt doors, doors over 2.5m and when the closing force as measured on the bottom of the door is over 400N (40kg).

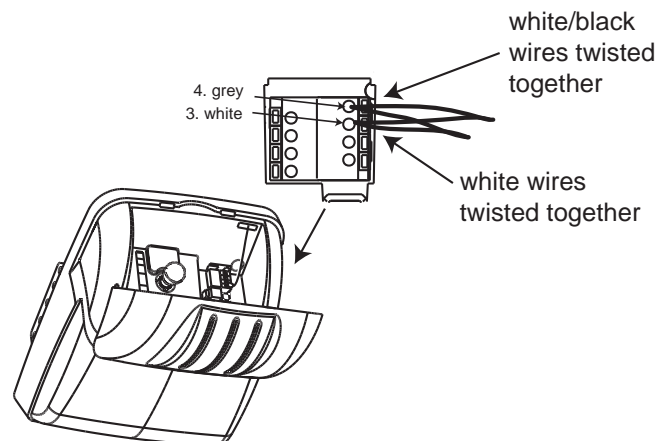
After opener has been installed and adjusted, **The Protector System™** accessory can be installed. Instructions are included with this accessory.

The Protector System™ provides an additional measure of safety against a small child being caught under a garage door. It uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing and is *strongly recommended for homeowners with young children.*

NOTE: The opener will automatically detect the protector system when it is installed. The opener will not close unless the sensors are aligned.

Connecting the Protector System

Locate the terminals on the back of the unit. Strip all wires back about 10mm then twist the two white wires and the two white/black wires together. Trim the twisted wires to approximately 6mm. Use a small screwdriver or pen to hold down the spring terminals, insert the white/black wires into the grey terminal (4), then terminate the white (only) wires into the white terminal (3).



26 INSTALLING THE CM128 WIRELESS WALL BUTTON (OPTIONAL)

Carefully pry open the CM128 and locate the two screw for mounting.

To attach to the wall, use the two screws and wall anchors provided if mount to plaster wall (if using a recessed wall box do not use anchors).

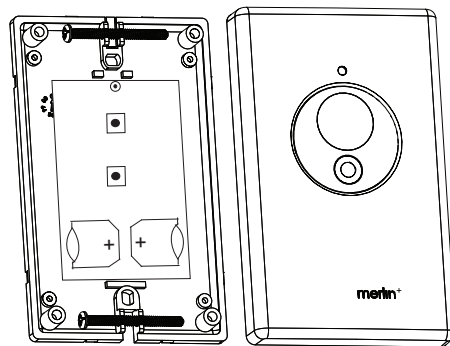
NOTE: Tightening the wall mount screws will reduce clearance between bracket and wall.

NOTE: Your CM128 Wireless door controller should be pre-programmed into your unit, you should only need to program additional units.

Program the Wall control into the Rolling Code Receiver Using the orange "LEARN" Button:

1. Press and hold down the button you wish to program to the opener. The orange LED will flash to indicate it is receiving signal from the transmitter.
2. Press and release the "LRN" button.
3. The courtesy LEDs will flash once.

Ensure the door is clear of obstruction, then test the transmitter.



Locate minimum 1.5m above the floor.

27 WIRELESS PROGRAMMING (OPTIONAL ACCESSORIES)



Activate the opener only when door is in full view, free of obstruction and properly adjusted. No one should enter or leave garage while door is in motion. Do not allow children to operate push button(s) or remote(s). Do not allow children to play near the door.

NOTE: The transmitter(s) and wall button supplied with your opener are factory programmed.

If you purchase additional transmitters, the garage door opener must be programmed to accept the new remote code.

Program the Receiver to Match Additional Transmitter Codes:

Using the orange "LEARN" Button:

1. Press and hold down the transmitter button you wish to program to the opener. The orange LED will flash to indicate it is receiving signal from the transmitter.
2. Press and release the "LRN" button.
3. The courtesy LEDs will flash once.

Ensure the door is clear of obstruction, then test the transmitter.

Using the Motion Detecting Control Panel (optional accessory):

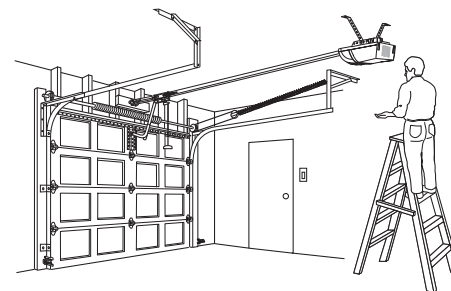
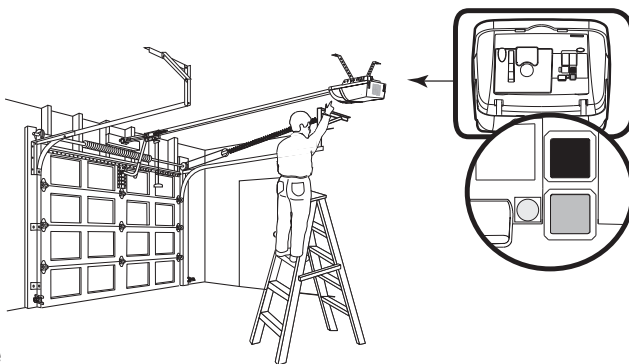
1. Press and hold the button on the hand-held remote that you wish to operate your garage door (1).
2. While holding the remote button, press and hold the LIGHT button on the Motion Detecting Control Panel (2).
3. Continue holding both buttons while you press the push bar on the Motion Detecting Control Panel (all three buttons are held) (3).
4. Release buttons when the opener light flashes. It has learned the code. If the light bulb is not installed, two clicks will be heard (4).

Now the opener will operate when the transmitter push button is pressed. If you release the transmitter push button before the opener light flashes, the opener has not learned the code.

To Erase all Transmitter Codes:

To deactivate any unwanted remote, first erase all codes: Press and hold the orange "learn" button on opener until the learn indicator light goes out (approximately 6 seconds).

All previous codes are now erased. Reprogram each remote or keyless entry you wish to use.

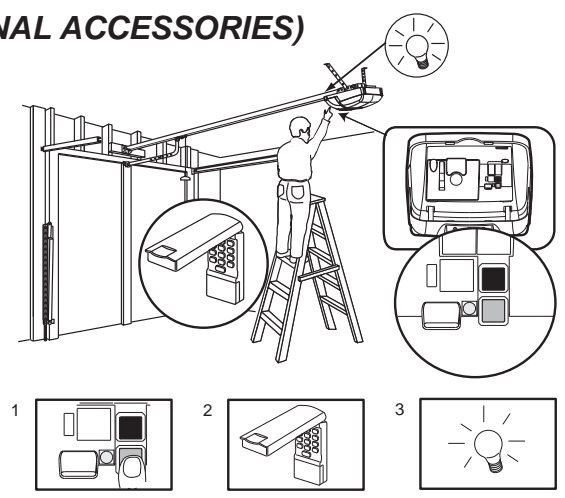


28 KEYLESS DEVICES PROGRAMMING (OPTIONAL ACCESSORIES)

NOTE: Your new Keyless Entry must be programmed to operate your garage door opener.

Program the Receiver to Match Additional Transmitter Code Using the orange "LEARN" Button:

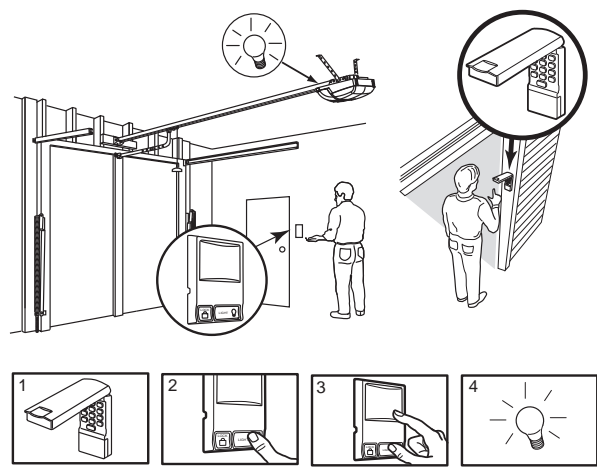
1. Press and release the orange "learn" button (1) on opener. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds, enter a four digit personal identification number (PIN) of your choice on the keypad (2), then press and hold the ENTER button.
3. Release the button when the opener light flashes (3). It has learned the code. If the light bulb is not installed, two clicks will be heard.



NOTE: This method requires two people if the Keyless Entry is already mounted outside the garage.

Using the Motion Detecting Control Panel:

4. Enter a four digit personal identification number (PIN) of your choice on the keypad, then press and hold ENTER.
5. While holding the ENTER button, press and hold the LIGHT button on the Motion Detecting Control Panel.
6. Continue holding the ENTER and LIGHT buttons while you press the push bar on the Motion Detection Control Panel (all three buttons are held).
7. Release buttons when the opener light flashes. It has learned the code. If the light bulb is not installed, two clicks will be heard.

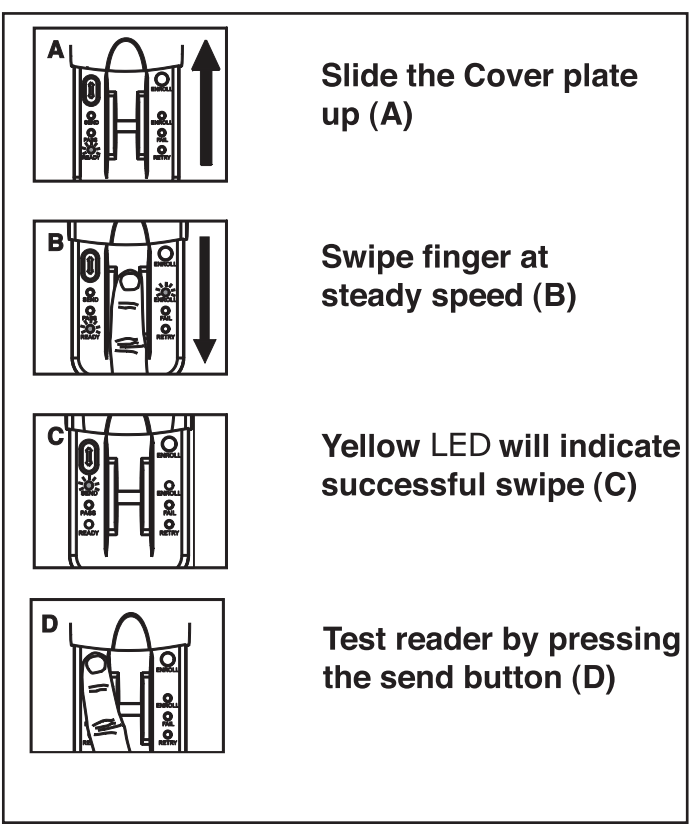


PROGRAMMING C379 WIRELESS FINGERPRINT ACCESS SYSTEM (OPTIONAL ACCESSORY)

Full instruction are available with this accessory. Once you have enroled your user into the C379 you can program the unit into your opener.

Using the orange "LEARN" Button:

1. Press and release the orange "learn" button (1) on opener. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds, slide the cover of the C379 up as illustrated (A). Swipe your finger on the reader head at a steady speed (B) until the yellow led turns on (C).
3. When the opener light flashes (3). It has learned the code. If the light bulb is not installed, two clicks will be heard, ensure there are no obstructions in the path of the door, then press the Send button (D) to test the door.



Slide the Cover plate up (A)

Swipe finger at steady speed (B)

Yellow LED will indicate successful swipe (C)

Test reader by pressing the send button (D)

29 INSTALL DOOR CONTROL (OPTIONAL)



Locate door control where the garage door is visible, away from door and door hardware and out of the reach of children. Mount at least 1.5m (5 feet) above the floor
 Serious personal injury from a moving garage door may result from misuse of opener. Do not allow children to operate the door control or transmitter.

Permanently fasten the caution label to the wall near the door control as a reminder of safe operating procedures.

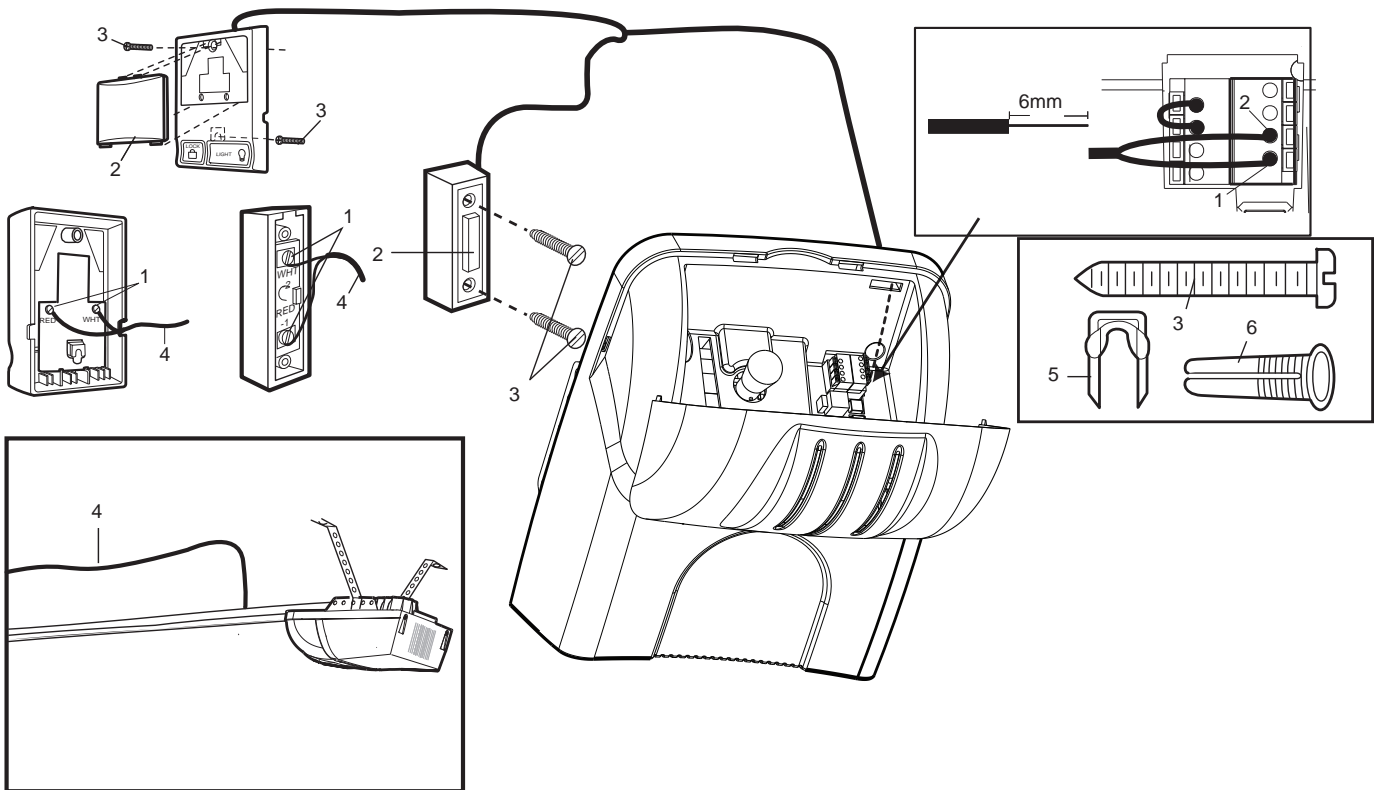
There are 2 terminals (1) on the back of the door control (2). Strip about 6mm (1/4") of insulation from bell wire (4). Separate wires enough to connect the white/red wire to RED terminal screw 1 and the white wire to WHT terminal screw 2.

Fasten the door control to an inside garage wall with sheet metal screws (3) provided. Drill 4mm (5/32") holes and use anchors (6) if installing into plasterboard wall. A convenient place is beside the service door and out of reach of children.

Run the bell wire up the wall and across the ceiling to the garage door operator. Use insulated staples (5) to secure wire. The receiver quick connect terminals are located behind the light lens of the operator. Connect the bell wire to the terminals as follows: white/red to red (1) and white to white (2).

Operation of the Door Control

Press to open or close the door. Press again to stop the door while moving.



30 USING THE MOTION DETECTING CONTROL PANEL (optional accessory)

Press the push bar (1) to open or close the door. Press again to stop the door.

Light feature

Press the light button to turn the opener light on or off. It will not control the opener lights when the door is in motion. If you turn it on and then activate the opener, the light will remain on for 2 1/2 minutes. Press again to turn it off sooner. The 2 1/2 minute interval can be changed to 1-1/2, 3-1/2 or 4-1/2 minutes as follows: Press and hold the Lock button until the light flashes (about 10 seconds). A single flash indicates that the timer is reset to 1-1/2 minutes. Repeat the procedure and the light will flash twice, resetting the timer to 2-1/2 minutes. Repeat again for 3-1/2 minute interval, etc, up to a maximum of four flashes and 4-1/2 minutes.

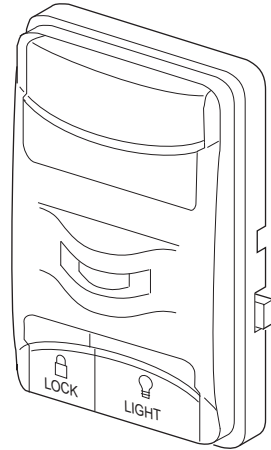
Lock feature

Designed to prevent operation of the door from hand-held transmitters. However, the door will open and close from the Door Control, the Outside Keyswitch and the Keyless Entry Accessories.

To activate, press and hold the Lock button for 2 seconds. The push bar light will flash as long as the Lock feature is on.

To turn off, press and hold the Lock button again for 2 seconds. The push bar light will stop flashing.

The Lock feature will also turn off whenever the "LEARN" button on the opener panel is activated.

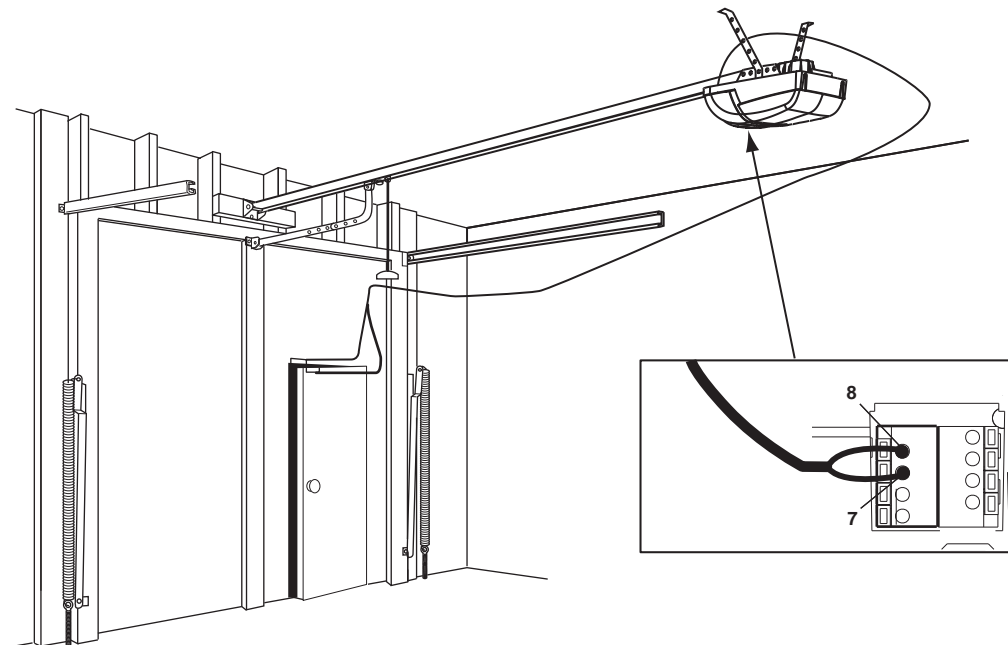


31 SPECIAL FEATURES

A. Door within a door connection

Open light lens. Locate auxiliary quick connect terminals 7 and 8. Remove factory installed link. Insert bell wire into quick connect terminals 7 and 8.

A



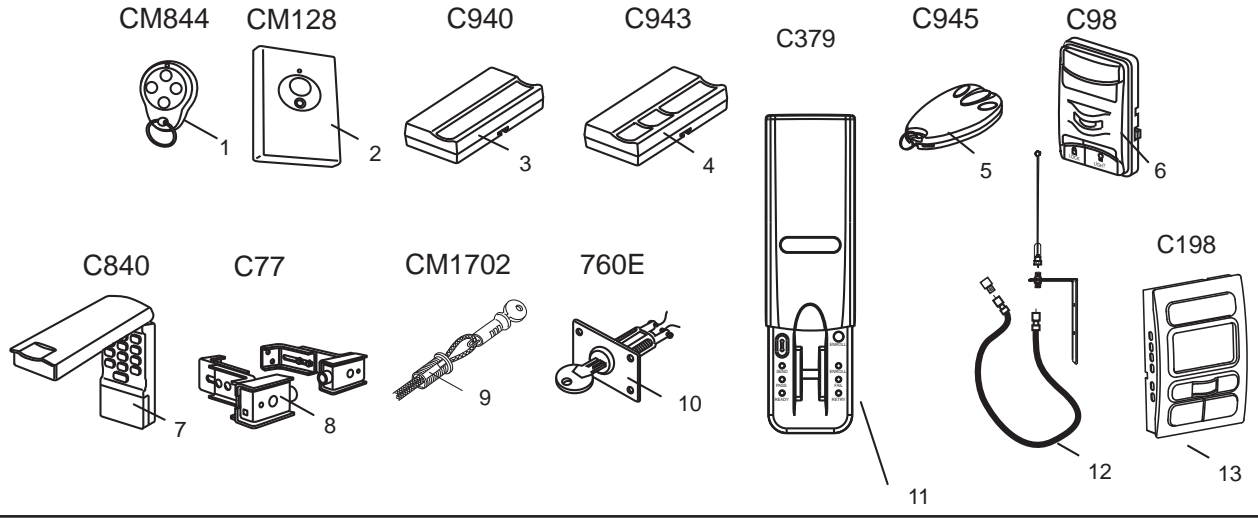
32 ACCESSORIES

- (1) Model CM844
- (2) Model CM128
- (3) Model C940
- (4) Model C943
- (5) Model C945
- (6) Model C98
- (7) Model C840

- 4 Channel transmitter
- Wireless Wall Button
- Single-Channel transmitter
- 3-Channel transmitter
- 3-Channel Mini transmitter
- Motion Detecting Control Panel
- Keyless Entry System

- (8) Model C77
- (9) Model CM1702
- (10) Model 760E
- (11) Model C379
- (12) Model ANT4X-1LM
- (13) Model C198

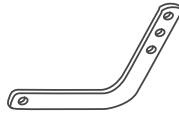
- The Protector System™ IR Beams
- Quick Release Lock
- Outside Keyswitch
- Wireless Fingerprint Access System
- 433MHz Antenna, Cable and Adaptor
- LCD Motion Detecting Control Panel



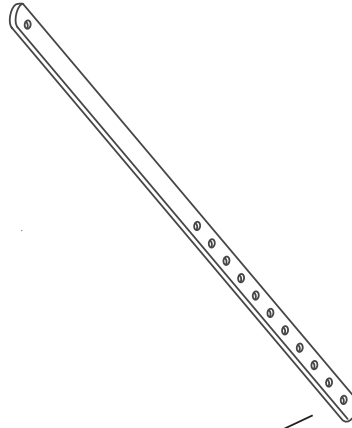
33 REPLACEMENT PARTS



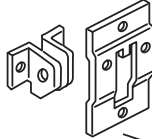
041A2828



178B0086B



178B0034B

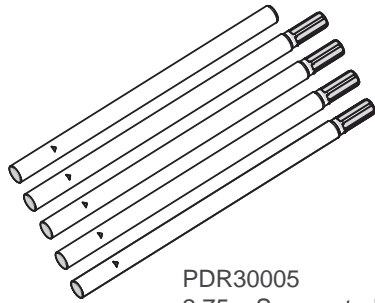


012B0905

012B0906



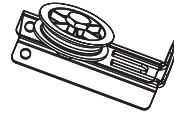
083A0011-1



PDR30005
2.75m Segmented Pole Pack



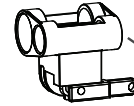
002A1658



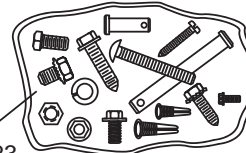
002A1659



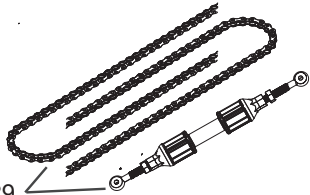
012B0415



001A7350



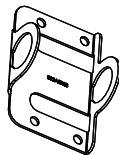
001A5643-23



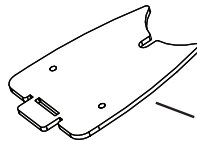
001A6829



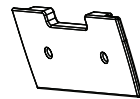
184A0242



012A0928

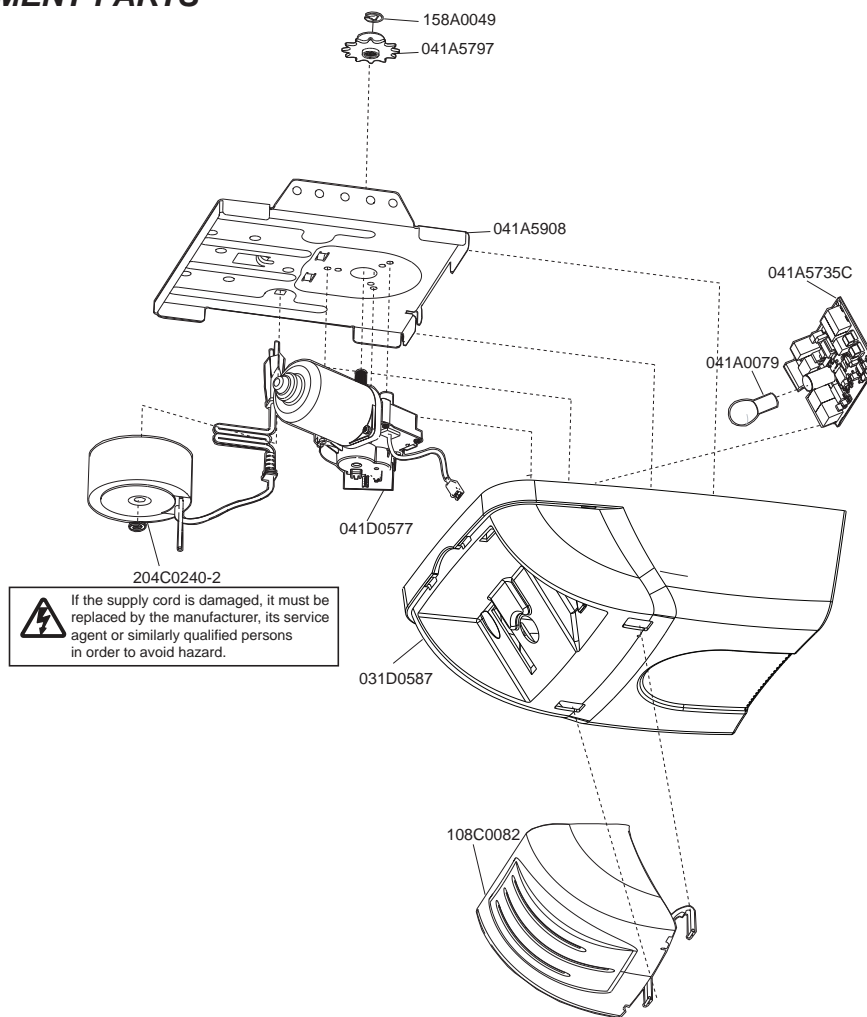


142A0230



142A0229

34 REPLACEMENT PARTS



CARE OF YOUR OPENER

When properly installed your opener will operate with minimal maintenance. The opener does not require additional lubrication.

Limit and Force Adjustments: These adjustments must be checked and properly set when opener is installed. *Weather conditions may cause some minor changes in the door operation, requiring some re-adjustments, particularly during the first year of operation.*

Refer to the limit and force adjustments in sections 22 & 23. Follow the instructions carefully and **repeat the safety reverse test after any adjustment.**

Transmitter: The portable transmitter may be secured to a car sun visor with the clip provided. Additional remotes can be purchased at any time for use in all vehicles using garage. Refer to Accessories. Any new remotes must be programmed into the opener.

Transmitter Battery: If transmission range decreases replace the battery.

To Change Battery: To replace batteries, use the visor clip or screwdriver blade to pry open the case. Insert batteries *positive side up*. To replace cover, snap shut along both sides. Do not dispose of the old battery with household waste.

MAINTENANCE OF YOUR OPENER

Once a Month:

- *Repeat safety reverse test.* Make any necessary adjustments.
- *Manually operate door.* If it is unbalanced or binding, call for professional garage door service.
- *Check to be sure door opens and closes fully.* Adjust Limits and/or Force if necessary.

Once a Year:

Oil door rollers, bearings and hinges. Do not grease the door tracks.

Clean and lubricate the pole, chain and trolley. The opener does not require additional lubrication.

1. Opener doesn't operate from either door control or remote:

- Does the opener have electric power? Plug lamp into outlet. If it doesn't light, check the fuse box or the circuit breaker. (Some outlets are controlled by a wall switch.)
- Have you disengaged all door locks? Review installation instruction warnings on page 1.
- Is there a build-up of ice or snow under door? The door may be frozen to ground. Remove any obstruction.
- The garage door spring may be broken. Have it replaced.

2. Opener operates from remote but not from door control:

- Is door control button lit? If not, remove the bell wire from the opener terminals. Short the red and white terminals by touching both terminals at the same time with a piece of wire. If the opener runs, check for a faulty wire connection at the door control, a short under the staples, or a broken wire.
- Are wiring connections correct? Review step 29.

3. Door operates from door control but not from remote:

- Replace battery if necessary.
- If you have two or more remotes and only one operates, review Program Your Opener, Remote and Keyless Entry steps 27 and 28.
- Is the door control button flashing? The opener is in lock mode. If you have a Motion Detecting Control Panel, push and hold the Lock button for 2 seconds. The door control button will stop flashing.

4. Remote has short range:

- Is battery installed?
- Change the location of the transmitter on the car.
- A metal garage door, foil-backed insulation or metal siding will reduce the transmission range.

5. Door reverses for no apparent reason and opener light doesn't flash:

- Is something obstructing the door? Pull manual release handle. Operate door manually. If it is unbalanced or binding, call for professional garage door service.
- Clear any ice or snow from garage floor area where garage door closes.
- Repeat Setting Limits and Force, see adjustment steps 22 and 23.

Repeat safety reverse test after adjustment is complete.

6. Door reverses for no apparent reason and opener light flashes for 5 seconds after reversing:

Check The Protector System™ (if you have installed this accessory). If the light is flashing, correct alignment.

7. The garage door opens and closes by itself:

Make sure remote push button is not stuck "on". For peace of mind, install an Open Door Monitor so you can check the status of your door.

8. Door stops but doesn't close completely:

Repeat Setting the Limits, see adjustment step 22.
Repeat safety reverse test after any adjustment of door arm length, close force or down limit.

9. Door opens but won't close:

- Check The Protector System™ (if you have installed this accessory). If the light is flashing, correct alignment.
 - If opener light does not flash and it is a new installation, repeat Setting the Limit and Force steps 22 and 23.
- Repeat the safety reverse test after the adjustment is complete.

10. Opener light does not turn on:

Replace light bulb (BA15s 24V/21W maximum).

11. Opener strains:

Door may be unbalanced or springs are broken. Close door and use manual release rope and handle to disconnect trolley. Open and close door manually. A properly balanced door will stay in any point of travel while being supported entirely by its springs. If it does not, call for professional garage door service to correct the problem.

12. Opener motor hums briefly, then won't work:

- Garage door springs are broken. SEE ABOVE.
- If problem occurs on first operation of opener, door is locked. Disable door lock. Repeat safety reverse test after adjustment is complete.

13. Opener won't activate due to power failure:

- Pull manual release rope and handle down to disconnect trolley. Door can be opened and closed manually. When the power is restored, pull the manual release handle down and toward opener. The next time the opener is activated, the trolley will reconnect.
- The Outside Quick Release accessory (if fitted) disconnects the trolley from outside the garage in case of power failure.

14. Setting the limits manually:

- Press and hold the black button until the yellow indicator light starts flashing slowly then release.
- Adjust the position of the door to the desired Up position by using the black button. Black moves the door UP (open) and orange moves the door DOWN (close).
Check to be sure the door opens high enough for your vehicle.
- Push the transmitter or door control. This sets the UP (open) limit and begins closing the door.

Immediately press either the orange or the black button.

The door will stop.

Adjust the desired DOWN (close) limit position using the orange button. Check to be sure the door is fully closed without applying excessive pressure on the pole (pole should not bow upwards and the chain should not sag or droop below the pole). Push the transmitter or door control. This sets the DOWN (close) limit and begins opening the door.

NOTE: If neither the black or the orange button is pressed, the door will reverse off the floor and the DOWN travel limit will be set automatically.

- Open and close the door with the transmitter or door control 2 or 3 times.
- If the door does not stop in the desired UP (open) position or reverses before the door stops at the DOWN (close) position, repeat Setting the Limits and Force, see adjustment steps 22 and 23.
- If the door stops in both the desired UP (open) and DOWN (close) positions, proceed to *Test the Safety Reversal System*.

OPERATION OF YOUR OPENER

Your opener can be activated by any of the following devices:

- **The Motion Detecting Control Panel.** Hold the button down until door starts to move.
- **The Outside Keyswitch or Keyless Entry System** (if you have installed either of these accessories).
- **The Transmitter.** Hold the push button down until the door starts to move.

Opening the Door Manually: Door should be fully closed if possible. Weak or broken springs could allow an open door to fall rapidly. Property damage or serious personal injury could result.

The door can be opened manually by pulling the release handle down. To reconnect the door, pull the release handle down and toward the opener.

Do not use the manual release handle to pull the door opener or closed. When the Opener is Activated by Transmitter or Lighted Door Control Button:

1. If open, the door will close. If closed, the door will open.
2. If closing, the door will stop.
3. If opening, the door will stop (allowing space for entry and exit of pets and for fresh air).
4. If the door has been stopped in a partially open or closed position, it will reverse direction.
5. If an obstruction is encountered while closing, the door will reverse.
6. If an obstruction is encountered while opening, the door will reverse and stop.
7. The optional Protector System™ uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing. It is STRONGLY RECOMMENDED for homeowners with young children.

Allow a 15 minute cooling period after 5 continuous operations of the opener. **The opener light** will turn on: 1. when opener is initially plugged in; 2. when the power is briefly interrupted; 3. when the opener is activated.

The light turns off automatically after 2-1/2 minutes. Bulb size is 24V/21W maximum.

SPECIFICATIONS

Input Voltage.....230-240 VAC, 50Hz
 Max. Pull Force600N
 Power100W
 Standby Power3 watt (nominal)
 Normal Torque5Nm
 Max door weight.....70kgs - spring balanced

Motor

Type.....DC gearmotor permanent lubrication

Drive Mechanism

DriveChain with two-piece trolley on steel pole.
 Length of Travel.....Adjustable to 2750mm (3.0m Pole)
 2500mm (2.75m Pole)

Minimum Travel Length...1.1m

Travel Rate127-178mm per second

Lamp.....On when door starts, off 2-1/2 minutes after stop (BA15s, 24V/21W)

Door LinkageAdjustable door arm. Pull cord trolley release.

Safety

PersonalPush button stop in **UP and DOWN** direction. Automatic safety reverse in **DOWN** direction and stop in **UP**.

Electronic.....Automatic force adjustment

ElectricalTransformer overload protector and low voltage push button wiring.

Limit DeviceOptical RPM/Passpoint detector.

Limit AdjustmentElectronic, Semi and Fully Automatic.

Start Circuit.....Low voltage push button circuit.

Dimensions

Length (Overall).....3290mm (3.0m pole)
 3040mm (2.75m pole)

Headroom Required60mm

Hanging Weight10.5kg

Receiver

Memory Registers12

Operating Frequency433.92MHz

SPECIAL NOTE: Chamberlain strongly recommends that the Protector System™ be installed on all garage door openers.

CHAMBERLAIN LIMITED WARRANTY
Merlin Professional MT60P
Sectional Garage Door Opener

Chamberlain Australia Pty Limited / Chamberlain New Zealand Limited (**Chamberlain**), the manufacturer of Merlin® automatic garage door openers, is committed to manufacturing and supplying high quality goods. As part of this commitment, we seek to provide reliable service and support for our goods and are pleased to provide you, the original purchaser, with this Chamberlain Limited Warranty.

We also provide the following statement as required by the Australian Consumer Law: In Australia, in addition to your rights under this Chamberlain Limited Warranty, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Chamberlain's warranty

Chamberlain warrants to the original purchaser of the Merlin® MT60P Sectional Door Opener (Unit) that all parts of the Unit, other than remote controlled transmitters and accessories, globes and batteries, are free from defects in materials and workmanship for a period of 24 months or 5,000 cycles (opening & closing of the garage door) whichever comes first, from the date of purchase when installed in a residential premise with a residential specified garage door that is designed for the sole purpose of domestic domicile. Chamberlain warrants that remote controlled transmitters and accessories included with the Unit are free from defects in materials and workmanship for a period of 12 months from the date of purchase.

Batteries and globes are not covered under the Chamberlain Limited Warranty.

It is a condition of this Chamberlain Limited Warranty that the Unit is sold, installed and serviced by a Professional Dealer appointed by Chamberlain. A Merlin® branded garage door opener purchased over the internet and installed by a person other than a Professional Dealer will not be covered by this Chamberlain Limited Warranty.

It is also a condition of this warranty that the garage door is operable by hand and opens and closes with no more than a maximum of 20kgs of lifting weight. Chamberlain recommends that the garage door is serviced by a garage door technician every 12 months. This garage door service fee will be at the consumer's expense.

NB: The Australian Garage Door Association directs attention to consumers to maintain your garage door in good running order it is important your door is serviced by a professional garage door technician every 12 months or earlier as conditions may require.

During the applicable Chamberlain Limited Warranty period, if you are concerned that the Unit may be defective, for prompt on-site service call the Professional Dealer that sold/installed the opener, or our service centre on the toll free number below and a Chamberlain technician will diagnose the problem and arrange for this to be rectified. Once the problem has been diagnosed, subject to your rights under the Australian Consumer Law with respect to major failures, Chamberlain or its Professional Dealer will provide you with:

1. repairs to the Unit
or
2. a replacement Unit.

Repairs and replacement parts provided under this Chamberlain Limited Warranty are provided free of charge and are warranted for the remaining portion of the original warranty period.

This Chamberlain Limited Warranty provides benefits which are in addition to your other rights and remedies as a consumer.

Exclusions

If our service centre determines that a warranty claim has been made in respect of a failure or defect arising under or out of any exclusion detailed below such that the claim is not covered under this Chamberlain Limited Warranty, we may, subject to your other rights and remedies as a

consumer, charge you a fee to repair, replace and/or return the Unit to you.

This Chamberlain Limited Warranty does not cover any failure of, or defect in, the Unit due to:

- 1 non-compliance with the instructions regarding installation, operation, maintenance and testing of the Unit or of any product with which the Unit is used;
- 2 any attempt by a person other than a Professional Dealer to repair, dismantle, reinstall or move the Unit to another location once it has been installed;
- 3 tampering, neglect, abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal domestic use;
- 4 problems with, or relating to, the garage door or garage door hardware, including but not limited to the door springs, door rollers, door alignment or hinges;
- 5 problems caused by electrical faults or replacement of batteries or light bulbs;
- 6 water or moisture ingress that causes corrosion or electrical malfunction;
- 7 corrosion caused by sea air if located near a waterway, beach etc; or
- 8 fitment to a commercial door or in a commercial operating application.

NB: A General Purpose Outlet (GPO) ie: power point must be supplied by the consumer as this electrical fitting does not form a part of the Unit (opener).

If this Chamberlain Limited Warranty does not apply, you may have rights available to you under the Australian Consumer Law.

Liability – Australia only

Except as set out in the Australian Consumer Law (being Schedule 2 of the Competition and Consumer Act 2010) (as amended, consolidated or replaced):

- 1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
- 2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Liability – New Zealand only

Except as set out in the Fair Trading Act 1986 and the Consumer Guarantees Act 1993 (as amended, consolidated or replaced):

- 1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
- 2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Note: We request that you retain your sales docket or invoice as proof-of-purchase and attach it to this manual to enable you to establish the date of purchase in the unlikely event of a warranty service being required. Chamberlain reserves the right to change the design and specifications of the Unit without prior notification. Some features or accessories of the Unit may not be available in certain markets or areas. Please check with your distributor.

Chamberlain service centre contact details

Australia

Phone toll free 1800 638 234
Fax toll free 1800 888 121
Chamberlain Australia Pty. Ltd.
PO BOX 1446
Lane Cove NSW 1595

New Zealand

Auckland phone 09 477 2823
Phone toll free 0800 653 667
Fax toll free 0800 653 663

Email: customerservice@chamberlainnz.com

Website: www.merlingo.com

™ Trademark of The Chamberlain Group, Inc.

® Registered Trademark of The Chamberlain Group, Inc.

© 2011 The Chamberlain Group, Inc